

# Thelymitra pauciflora

## COMMON NAME

sun orchid

## SYNONYMS

None

## FAMILY

Orchidaceae

## AUTHORITY

Thelymitra pauciflora R.Br.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## NVS CODE

THEPAU

## CHROMOSOME NUMBER

2n = 26

## CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand: North Island, South Island, Stewart Island/Rakiura, Chatham Islands. Also Australia (Queensland, New South Wales, Australian Capital Territory, Victoria, South Australia and Tasmania).

## HABITAT

Mostly coastal to lowland, rarely lower montane. Usually in very open shrubland, on clay pans, gumland scrub, forest margins, in ultramafic scree and in open grassland. This species is also commonly found in urban areas along street verges in bark gardens and wasteland.

## WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Flowering plant, Kennedy Bay (January).  
Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Flowering plant, Kennedy Bay (January).  
Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Glabrous, terrestrial orchid. **Tubers** 10–20 × 5–10 mm, ovoid, fleshy pinkish white to pinkish grey. **Leaf** 80–300 × 3–6–(12) mm, erect, fleshy, canaliculated, dark or light green with purplish to maroon base, often spotted with rust, abaxially prominently ribbed, ribs often maroon, sheathing at base, apex acute to acuminate. **Inflorescence** 0.15–0.6 m tall, 1–1.5–(3) mm diameter, stout but slender, straight, dark green to purple-green to reddish. **Sterile bracts** 1–2–(3), 15–50 × 3–5 mm, linear to linear-lanceolate, closely sheathing, acute to acuminate, green or maroon, sometimes purplish. **Fertile bracts** 4–15 × 2–5 mm, ovate-acuminate to obovate-acuminate, sheathing at pedicels, green to purple-green. **Pedicels** 1–10 mm long, slender. **Ovary** 5–12 × 2–4 mm, purple-green to red-green, narrow-obovoid. **Flowers** 1–8, 15–20 mm diameter, dark blue to mauve, sometimes white; opening only on very hot, still, sunny days, mostly entomophilous, tending to autogamous. **Perianth segments** 6–10 × 3–5 mm, concave, shortly apiculate; **dorsal sepal** lanceolate to ovate, obtuse to subacute; **lateral sepals** lanceolate to ovate, often asymmetric, acute; **petals** ovate to obovate, obtuse to subacute; labellum elliptic to lanceolate, acute, often smaller than other segments. **Column** 4.0–5.0 × 2.0–2.5 mm, erect from end of ovary, pale blue to dark pink; post anther lobe 1.8–2.5 × 1.0–1.5 mm, cucullate, tubular, gently curved, usually blackish-purple to reddish-brown, apex entire to emarginate, bright yellow; post-anther lobe extension 0.4–0.7 mm; auxiliary lobes absent or sometimes present as 2 tiny incurved spurs on the lower apical margin of the post-anther lobe; lateral lobes converging, 0.5–1.0 mm long, digitiform, porrect at base, bent sharply upwards near the middle at 90°, each with a subterminal tuft of white (or mauve) cilia that touch the ventral side of the apex of the post-anther lobe; cilia 1–1.5 mm long. **Anther** inserted above central column, 2.0–2.5 × 1.0–1.5 mm. **Stigma** situated at base of column, 1.5–2 × 1.5–2 mm, ovate-quadrate, margins irregular. **Capsules** 8–15 × 3–6 mm, obovoid, erect, deeply ribbed.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to native orchids of New Zealand](#)

## SIMILAR TAXA

*Thelymitra colensoi* Hook.f. is rather similar and often confused with this species. However, *T. colensoi*, is an endemic species which is much smaller and more slender, with fewer flowers (up to 5) which almost never open, and then only one at a time. The flowers are certainly autogamous and probably also cleistogamous. The petals are pale blue to pale pink. The post-anther lobe is not as thin or as deeply inturned as *T. pauciflora*, pale blue to pink, grading through brown to reddish-brown with a pale yellow to yellow margin. The post-anther lobe is rather similar to *T. longifolia* G.Forst. though much more deeply cleft. *Thelymitra colensoi* is often known in New Zealand by its later synonym *T. intermedia* Berggren.

## FLOWERING

September–December

## FLOWER COLOURS

Blue, Violet/Purple

## FRUITING

November–March

## PROPAGATION TECHNIQUE

Easily grown from tubers. Often naturalises in suitable habitats. Not a very attractive subject because the flowers tend only to open on very hot still days, and the leaves are usually infected with thelymitra rust. However, it is easily grown, in a well drained, sunny situation, and plants soon form small colonies through vegetative spread from the tubers.

## ETYMOLOGY

**thelymitra**: Woman's hat

**pauciflora**: Few-flowered

## WHERE TO BUY

Not commercially available

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007. Description subsequently published in Rolfe & de Lange (2010). See also Jeanes (2004).

## REFERENCES AND FURTHER READING

Jeanes J. 2004. A revision of the *Thelymitra pauciflora* R.Br. (Orchidaceae) complex in Australia. *Muelleria* 19: 19–79. <https://www.biodiversitylibrary.org/page/59426325#page/21/mode/1up>.

Rolfe JR, de Lange PJ. 2010. Illustrated guide to New Zealand sun orchids, *Thelymitra* (Orchidaceae). Jeremy Rolfe, Wellington, NZ. 57 p.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Thelymitra pauciflora* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/thelymitra-pauciflora/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/thelymitra-pauciflora/>